



# Grain Food Plots



Wildlife habitat consists of food, water, cover, and a good arrangement of these components. Most wildlife species find adequate food during daily movements, however, many areas will benefit by the landowner providing additional food through the development of grain food plots. During the winter, especially in late winter and early spring, wildlife can benefit from reliable food sources provided by landowners. Species of wildlife ranging from small mammals and songbirds, to deer and turkey, may benefit from grain food plot establishment. The type of food provided, and the placement of the plots, can result in wildlife overwintering in good condition and ready for the spring breeding season.

## Food Plot Size and Placement

Food plots are best utilized when placed along the edge of different cover types. The border between an open grassland and woods, or between an open grassland and a brushy area will benefit species using the different cover types. It is important to position the plots near cover to ensure species using the plots will not be overly exposed to predators. Food plots should be placed on non-erodible sites, and, if possible, adjacent to good cover. The plots should receive at least 6 - 8 hours of sunlight per day.

Long, narrow plots (500' x 20') and small plots (1/4 to 1/2 acre) interspersed throughout the property are preferable. A strip 50 feet wide and 218 feet long is 1/4 acre. One half to one acre of food plot per 40 acres should be sufficient to provide valuable food to wildlife. Several smaller food plots established in key locations are more desirable than 1 or 2 large plots.

If the food plot location was formerly fescue, efforts should be made to eradicate the fescue before planting. Annual weeds are very beneficial to wildlife, but fescue will compete against the grains being planted and can also be toxic to wildlife. *See the Habitat Management Fact Sheet on Fescue Eradication.*

## Food Plot Establishment

Food plots should be rotated so that the same location is planted only once every two or three years. Grain and valuable cover may still be available the second year after planting, and annual weeds such as ragweed, smartweed, pigweed, and foxtail will germinate in older food plots providing valuable food for wildlife. One recommended method of providing a good wildlife feeding area is to prepare a seed bed twice as wide as the width of the proposed food plot. Plant the food plot on half of the prepared seed bed and leave the other half fallow. The following year leave the previous year's plot standing and plant the other half of the disced ground. By rotating the plots in this manner, natural food sources will be provided along with a variety of cover and food including the grain planted.

As with any crop, proper applications of lime and fertilizer will improve food plot success. If possible, a soil test should be conducted. In lieu of a soil test, a general guideline would be to use 200 lbs/ac of 12-12-12 fertilizer for grain food plots. Herbicides should not be used (except with sunflower plots) or used at a very low rate. To minimize excessive weed competition, planting should be delayed until late May or early June.

## Types of Food Plots

Before planting, a good seed bed should be prepared by discing the soil thoroughly. The method of planting depends on results desired, and availability of equipment, time and manpower. Effective food plots can be provided by discing and broadcasting fertilizer and seed using broadcast equipment or by hand. It should be remembered, light grain stands are more beneficial than crowded, heavy seeded plots. Areas of bare soil and annual weeds that establish in food plots provide excellent components of good wildlife habitat. **Do not sow the seeds to thick.** Listed below are grain types that may be used, the rates and methods of planting, and wildlife attracted.

**Corn:** Corn ranks at the top of wildlife food types. It is attractive to deer, turkeys, small mammals, songbirds, and upland game birds. Corn food plots may be difficult to establish in high deer density areas. Several special varieties are available which provide low ear height, multiple small ears, and varying maturity dates. Popcorn, due to its small kernel size, is also good for wildlife plantings. Corn may be planted with conventional row crop equipment in well prepared soil in late April to mid-May. A rate of 8 - 10 lbs/acre would be sufficient. Corn plots may also be established by broadcasting the seed (with fertilizer) at a 15 - 20 lb rate and then discing in the seed.

**Sunflowers:** The "oil" variety of sunflowers grown commercially make excellent food for mourning doves, upland game birds, songbirds, and small mammals. Sunflowers are relatively drought-tolerant and grow 4-6 feet in height. Sunflowers should be planted with conventional tillage equipment at 3 - 5 lbs/ac or broadcast at 5 - 10 lbs/acre in May. If broadcast, the seed bed should be disced to lightly cover the seed. If the sunflower plot is being planted to attract doves for hunting purposes, herbicide should be used to keep the bed free of weeds, and the seed should be planted as soon as soil permits in the spring. Sunflowers mature early in the fall, and by winter the seed has either been eaten or has dropped to the ground. Since this will not benefit wildlife during the harsh winter months, additional food plots of corn or sorghum should be provided near the sunflowers.

**Sorghum, Millet and Milo:** These grains are in the sorghum family and produce BB sized seeds which are used by a variety of birds including doves, quail, waterfowl, turkeys, songbirds and small mammals. The plants grow 2 - 3 feet, and usually stand up well to snow, providing both food and cover for wildlife. The seed can be drilled at 10 lbs/acre or broadcast at 15 - 20 lbs per acre. If broadcast, good soil contact should be made by light harrowing or discing. If deer browse the food plot to the extent that seed heads do not form, taller varieties may be planted to avoid the problem. Taller varieties may include, sudan grass or forage sorghum.

**Wheat:** Wheat ranks near corn in number of wildlife users and value to wildlife. Wheat makes an excellent nurse crop into which legume food plots may be seeded, and also provides a good food source both in the vegetative and grain states. Waterfowl, deer, upland game birds, songbirds, rabbits and other small mammals use wheat as a food source. Wheat can be broadcast or drilled in the fall at a rate of 1 bu/acre.

Landowners may wish to provide a mixture of different food sources in one food plot. If this is done, care should be taken not to crowd the seed. It should be remembered, that bare soil and annual weed growth in the food plots may be as important to wildlife as the grain provided. If a mixture of different seed types are used in one food plot, the rate of each should be cut to 1/4 the rate of that used in a single grain food plot.

A cheap and often overlooked source of food plot seed is bulk bird feed that can be purchased at most department stores. Many bird feed mixtures contain un-hulled oil sunflower, giant sunflower, sorghum, milo, and millets. Although the germination rate may not be as high as certified seed, good success can be achieved by broadcasting the seed at a higher rate. Care should be taken not to purchase bird seed that contains cracked corn, since it will not germinate.

The establishment of wildlife food plots is approved for use on Conservation Reserve Program (CRP) and Wetland Reserve Program (WRP) acreage provided the landowner's Conservation Plan has been amended accordingly. Owners of CRP or WRP acreage should contact their local USDA Natural Resources Conservation Service (NRCS) office for further information and restrictions.

Other grains such as barley, oats, and rye may be used as food plots. The above-mentioned grains may be obtained from local agricultural seed dealers. Often, the Division of Fish and Wildlife and certain conservation organizations make seed available to the public. Contact the local Private Lands Wildlife Biologist or the NRCS office for more information regarding the planting food plots for wildlife.

<b>Recommended Seeding Rates and Seeding Depths</b>			
<b>Grain</b>	<b>Drilled Seeding Rate</b>	<b>Broadcast Seeding Rate</b>	<b>Seeding Depth (inches)</b>
<b>Corn</b>	<b>8 - 10 lbs./acre</b>	<b>15 - 20 lbs./acre</b>	<b>½ - 2 inches</b>
<b>Sunflower</b>	<b>3 - 5 lbs./acre</b>	<b>5 - 10 lbs./acre</b>	<b>1 - 2 inches</b>
<b>Soybeans</b>	<b>30 lbs./acre</b>	<b>45 lbs./acre</b>	<b>1 ½ - 2 inches</b>
<b>Sorghum</b>	<b>10 lbs./acre</b>	<b>15 - 20 lbs./acre</b>	<b>1 - 2 inches</b>
<b>Wheat</b>	<b>40 lbs./acre</b>	<b>60 lbs./acre</b>	<b>1 - 2 inches</b>
<b>Millet/Milo</b>	<b>10 lbs./acre</b>	<b>15 - 20 lbs./acre</b>	<b>½ - 1 inch</b>
<b>Buckwheat</b>	<b>30 lbs./acre</b>	<b>40 lbs./acre</b>	<b>1 - 2 inches</b>

**Related *Habitat Management Fact Sheets:***

Fescue Eradication  
Woodland Edge Enhancement  
Wildflowers

Legume Food Plots  
Sodium Supplementation

Prepared by the Indiana Department of Natural Resources, Division of Fish and Wildlife. For up-to-date information concerning the Indiana Division of Fish and Wildlife, or for information on the location of your District Wildlife Biologist, visit our website at [www.wildlife.IN.gov](http://www.wildlife.IN.gov)

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